DOCUMENT RESUME

ED 141 519 CE 011 254

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TITLE	The ABE Learner: Health, Learning Ability, Language and Communication.
INSTITUTION	North Carolina State Dept. of Community Colleges, Raleigh. Div. of Adult Services.; North Carolina State Univ., Raleigh. Dept. of Adult and Community Coll. Education.
SPONS AGENCY	Southern Regional Education Board, Atlanta, Ga.
PUB DATE	May 74
NOTE	60p.
EDRS PRICE	MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS	*Adult Basic Education; *Adult Learning; Adult Students; Classroom Communication; *Communication Skills; Educationally Disadvantaged; Educational Research; Human Development; *Language Styles; *Learning Characteristics; Physical Characteristics; Student Characteristics; *Student Teacher Relationship; Teaching Guides

ABSTRACT

Intended to provide the teacher of adult basic education (ABE) with information about ABE learners, this handbook gives a picture of the more important characteristics which may influence the learning style and ability of ABE students. Practical suggestions are offered as to how the teacher may account for these characteristics in the teaching-learning situation. Discussion also covers physical characteristics as health, childhood development, and the effects of aging. (Material on children is intended to provide a developmental picture of the ABE learner.) Performance on standardized tests and other measures of learning ability are also considered, as are language and communication style. The sections dealing with learner characteristics are prefaced by a brief overview of poverty and adult educational disadvantagement in North Carolina. The author notes that while the information in the overview deals mainly with one State, the findings are typical of many others. An eight-page bibliography is appended. (WL)

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THE ABE LEARNER:

HEALTH, LEARNING ABILITY, LANGUAGE AND COMMUNICATION

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May, 1974

CE 011 254

ACKNOWLEDGMENTS

The authors wish to express their thanks to the Southern Regional Education Board, under the leadership of Dr. Edward T. Brown, which provided the funding and general direction under which this study was conducted. Recognition is also given to Dr. Edgar J. Boone, Head, Department of Adult and Community College Education, North Carolina State University, and Dr. Charles M. Barrett, Associate Vice-President for Continuing Education Programs, North Carolina Department of Community Colleges, for their overall support of this project. A special word of gratitude is offered to Dr. Thomas R. Dudley, Director of Division of Adult Services, and Dr. Hazel C. Small, Educational Consultant for Staff Development, both of the North Carolina Department of Community Colleges, for their many contributions to this project at all stages of its development.

INTRODUCTION

Why This Handbook Was Written

If any researcher or administrator in the field of adult basic education were asked to identify the most crucial element in a good program, the chances are that he would name the ABE teacher. Textbooks, curriculum planning and administrative systems are necessary, of course, but it is the teacher who works directly with the learners. He (or she) is the person who tailors the program to the learner's individual requirements, and deals every day with problems which must be handled immediately.

No one has yet discovered what makes an excellent teacher. Different styles, backgrounds and methods can all be equally effective in different hands. It seems logical, however, that one requirement for good teaching is knowledge of the learner. The more information a teacher has about his or her learners, the more resources the teacher commands in developing an effective classroom approach. Any teacher who has worked with ABE knows that adults are not "tall children". They are socially independent and self-directed. Adults generally enroll in ABE classes because they feel that they have concrete and highly personal needs that education can help satisfy. Adults have their own unique approach to learning, and a different set of problems and potentials than do younger learners.

This short handbook is intended to provide the teacher with some needed information about ABE learners. It attempts to give a quick and readable picture of some of the more important characteristics which may influence the learning style and ability of ABE students.

Practical suggestions are offered as to how the teacher may account for these characteristics in the teaching-learning situation.

What Areas Are Studied in This Handbook

The areas chosen for study in this handbook include such physical characteristics as health, childhood development and the effects of aging. Performance on standardized tests and other measures of learning ability are also considered, as are language and communication style. Obviously, this small handful of topics will not give the reader a total picture of the ABE learner; but they will give a hint of some of his particular difficulties and abilities, and suggest that his potential is probably much greater than may seem on the surface.

The sections dealing with learner characteristics are prefaced by a brief overview of poverty and adult educational disadvantagement in North Carolina. This was included on the argument that a problem will be much more meaningful if the reader first has an idea of its extent. While the information in that section deals mainly with only one state, the findings are typical of many others. The information sources should also be available in any library to the teacher who wishes to do a similar study of his own state or county.

How This Handbook Can Be Used

This study is intended to present the teacher with some information that might not otherwise be readily available. Its usefulness depends upon the teacher's needs and the resources that are available. Most of the problems that are discussed cannot be directly attacked--for example, if an ABE learner's earlier education was limited by chronic childhood illness, the teacher cannot really do anything about

that particular fact. He can, however, take the learner's past history into account when he designs the learning environment. Each section of this book is followed by a list of suggestions as to how the findings can be applied in the classroom. Hopefully these suggestions will help the teacher to develop some approaches of his own.

How This Handbook Was Designed

This study is the result of a review of research writings on disadvantaged children and adults along with a comparison of other handbooks written for ABE practitioners. It reflects only a very small sample of an enormous body of work. Material on children was used because it provided a developmental picture of the ABE learner; it shows him as an individual with a history that has helped to influence his current needs and abilities. Much of the best research has concerned itself with urban problems and social or economic inequality, and the teacher may have to modify the conclusions in applying them to rural learners or students who have not been the victims of racial prejudice. The overall intent in comparing practical and research literature was to synthesize the content into a form that would be of realistic value for the ABE practitioner and yet still have a solid research base. This handbook is the product of that synthesis.

POVERTY AND EDUCATIONALLY DISADVANTAGED ADULTS IN NORTH CAROLINA: AN OVERVIEW

To the man on the street, illiteracy probably seems a fairly rare occurrence. His opinion might be that "Almost everyone finishes a year or two of high school, and for those few who never got past the elementary grades there are plenty of jobs in agriculture, unskilled labor or service areas."

People generally feel that, with free and compulsory education, any adult living today surely has the basic reading and computation skills to learn what he has to when the need arises. Admittedly, automation is a problem, but it will be years before the now plentiful unskilled jobs disappear. Adult basic education (teaching academic skills comparable to the first eight years of formal school) is really limited just to isolated pockets of poverty in urban ghettos or the hills of Appalachia.

Unfortunately such views are false. Census data and some studies of poverty and education paint a much larger picture--and in much more somber tones--than general opinion might suggest. A full realization of the need for adult basic education (ABE) can come about only when some of the common myths and misinformed attitudes toward poverty and illiteracy are dispelled. A few simple observations illustrate the need for adult basic education far better than any long essay or argument could.

1. "A lot of North Carolinians don't have an adequate education." According to the 1970 census, 2% of the adults in North Carolina who are over 25 have not completed even one year of school. An additional

8% have less than a fourth-grade education. These percentages are small, but in real numbers they include over 264,000 adults. Over 37% of North Carolina's population over the age of 25 have had eight or fewer years of formal schooling. This translates to a population of about 983,000 North Carolinians who are in need of ABE classes![85,86]

2. "Black North Carolinians are likely to have less education than whites."

The same census data revealed that blacks are three times as likely as whites to have had no formal education at all. While one-third of the white population over 25 had eight or fewer years of school, the corresponding percentage for blacks was 55.[85,86]

3. "Things aren't getting better for the educationally disadvantaged."

In general, the educational level of North Carolina residents has shown a dramatic increase in the last decade. In 1960 the median number of school years completed was 8.9. In 1970 that educational measure was up to 10.6 years. In 1960, only 32% of the population had four years of high school or higher education; in 1970 the number had increased to 39%.[83,84,85,86] While these figures reflect progress in the educational development of the state's population, they also suggest that the man with a minimal education is falling farther and farther behind the average. An eighth-grade education that was just about average 10 years ago is well below today's competitive level.

4. "A lot of North Carolinians are poor."

In 1970 about 16% of the families in the state had incomes below poverty level (roughly $3,700 a year for a family of four). Again, blacks were worse off; 39% of North Carolina's black families were

poor, as compared with 11% of the white families. "Living in the country" may have emotional appeal, but it does not seem to provide a high standard of living: 17% of the white families and about 46% of the black families in rural North Carolina earned less than a minimum survival income.[86]

5. "There aren't that many jobs for the educationally disadvantaged."

Although North Carolina is pictured as a rural state, less than 5% of its working population are employed on the farm. Looking at the state's 1970 labor force, about 16% of the white males and 43% of the black males were employed as laborers, farm workers, or service workers.[86] Other job categories--such as skilled machine operators, craftsmen, and clerical workers--in today's sophisticated work environment seem to require more than an elementary school education. When the percentage of men working in "eighth-grade" jobs is compared with the percentage of men who have an eighth-grade education or less, an "employability gap" appears.

Table 1. Comparison of employment category and education of males by race, 1970

	White	Black
% over 25 years of age with eight or fewer years of education	59	79
% employed as service, farm workers, and laborers	15.8	42.6

The figures in Table 1 are not intended to suggest that the

undereducated and poor do not work; over three-fourths of the heads of poverty households are employed. The imbalance in figures simply suggests that there aren't many jobs for the man with little education, that these jobs tend to be temporary or seasonal, and that they generally do not pay very well.

6. "Adult basic education is not reaching the bulk of its client population."

Figures compiled by the National Center for Educational Statistics show that, in 1970, 26,398 adults were enrolled in ABE classes in North Carolina.[62] When compared with the more than 980,000 eligible adults, it appears that less than 3% of those who could have benefited from ABE classes were doing so.

7. "Black North Carolinians are participating more in ABE classes than are whites."

While a greater percentage of blacks in the state have less than an eighth-grade education, the sheer number of whites is much larger. That is, of the 983,000 adults in this educational category, over 700,000 are white.[86] However, of the 26,000 persons participating in ABE classes in 1970, over 17,000 were black.[62]

North Carolina is not alone in its educational needs; it simply reflects problems that have perplexed the entire nation for some time. A few brief statistical descriptions of the United States population of a few years ago outline some educational and social situations that apply in a general direction, if not in actual numbers, to North Carolina today.

1. In 1970, 1.6% of all whites and 7.5% of all blacks in the United States were totally illiterate.

Despite the proportions, there were far more whites than blacks in this category.

2. Thirty-seven percent of all blacks over 25 were illiterate.

3. Thirty-six percent of the family heads who had less than eight years of schooling earned less than $3,000 a year.

4. The majority of the nine million persons on welfare were illiterate.

5. Eight million individuals over 25 were illiterate.

6. Illiterates have a higher incidence of public institutional care, a lower life expectancy, a higher infant mortality rate, and a higher Selective Service rejection rate than literates.

7. Illiterates are least economically and socially mobile.

8. Men with five or fewer years of education have an unemployment rate almost six times as great as college graduates.[75]

The foregoing list of statements tends to suggest that educational disadvantagement is linked to poverty and that North Carolina, like other states, has an appreciable amount of both. However, two qualifications need to be made. First, this state is not to be singled out for criticism; it has one of the largest and most active ABE programs in the country. Further, the general educational and economic development in North Carolina has been quite positive. Secondly, it is not safe to draw one simple line between education and income. There are too many other complicating factors--racial prejudice, age, changing population patterns, and the shifting labor market, for example--to allow such a simplistic cause-and-effect argument. It seems safer to argue that while education may not be the one answer to eradicating poverty and unemployment, it is certainly a necessary part of the

solution. Education won't guarantee a good job, but a lack of education can pretty well promise its absence!

To emphasize the current need for participation in adult basic education, a few other factors should be considered, although they may not be as precisely stated as were the census data. One is the concept of "educational disadvantagement." Illiteracy can be defined in at least two ways: total and functional. The total illiterate is easy to identify--he has had no formal schooling and is therefore completely unable to read or write. The functional illiterate, on the other hand, cannot read and write well enough to cope with his social milieu. In this sense, a man who was adequately educated for a small agricultural community could become functionally illiterate as the community grows and becomes more industrialized and complex. Traditionally, the level for functional literacy has been the fifth grade, but the Office of Economic Opportunity recently raised this to an eighth-grade performance level.[12,62] It is generally felt that a tenth-grade performance level is required for the vocational training needed to cope with today's job changes.[1] As the work environment grows more sophisticated and the general population's level of education rises, it seems logical that the level of minimal educational competence also will continue to rise.

Another matter to consider is that the amount of illiteracy may show a false decline, at least on paper. Table 2 shows the number of total illiterates in North Carolina and the United States in the last two census surveys. Simply scanning these figures suggests that illiteracy is on the rout.

Table 2. Number of adults over 25 reporting no formal education

	1960	1970
United States	2,274,813	1,767,753
North Carolina	70,827	51,799

Unfortunately, many of the educationally disadvantaged have not learned to read in this time span; they have died. In 1960 about 70% of the population over 45 years of age were educationally disadvantaged.[28] A little reflection suggests that these adults were born in 1915, or before, and may have grown up in a time when formal education was neither expected nor available. Many may have left school during the Depression years. In North Carolina these older adults are not participating in ABE classes. In 1970, 22,000 of the 26,000 adults enrolled in ABE classes were under 45 years of age.[62] These facts suggest that the older population of illiterates are not learning to read and thereby reducing the number of educationally disadvantaged through education. The older undereducated appear to be reducing their numbers through death! Projections for the next two decades indicate that the percentage of educationally disadvantaged persons in each successive age group will remain at about 6.3%.[28] This suggests that as the population grows, the gross number of functionally illiterate persons will grow with it, and at an increasingly higher level of relative disadvantagement.

A final complicating factor is that reported years of school completed may not give a true picture of educational performance level.[1,29,32] Several studies have suggested that actual reading level can be far lower than the years of formal education suggest. This seems logical; adults with poor literacy skills would be least likely to maintain them and students with the greatest academic problems would be most likely to drop out.

Implications

What does all of this indicate for adult basic education in North Carolina? Statistics and numbers are dry, soulless facts. They do not have the persuasive force of a man who walks out of an employment agency because he cannot complete the application, or a woman who is summoned to court because she could not read the installment purchase plan she signed. But the large numbers suggest that ABE efforts in North Carolina are not a "one time" effort, a massive campaign that can eradicate the problem once and for all. Rather, they suggest that as the state grows and develops it must pay increasing attention to the needs--and resources--of its citizens. There is still a compelling demand for basic literacy training for masses of North Carolinians. And, such training must be an integral part of economic, social, and humanistic planning for the continuing growth of North Carolina.

HEALTH AND THE ABE LEARNER

Educators concerned with adult basic education and/or the education of disadvantaged children have cited poor health as one of the major learning handicaps among their students.[11,13,63,82,89] Among adults, these educators have found that as income level decreases, chronic conditions, days lost from work, and bed-restricting illnesses increase.[52] This would suggest that poor health may be directly related to absenteeism, high drop-out rates, and listless performance in the ABE classroom.

The overall health picture of the disadvantaged is bleak. The poor have a higher rate of infant mortality and a lower life expectancy than do the more affluent.[1,44,52,57,89] Likewise, communicable diseases are more frequent among the disadvantaged, while most degenerative diseases are not.[52] Some differences in the rate of degenerative disease may be attributed to the racial or ethnic backgrounds of disadvantaged groups--blacks, for example, have a lower rate of coronary disease than whites and American Indians have a low frequency of duodenal ulcers.[57] However, the incidence of communicable diseases probably reflects an environmental basis of poor living conditions, inadequate diet, and a lack of preventive medical care.[1,24]

Among the most commonly mentioned health problems of the disadvantaged are malnutrition, chronic fatigue, anemia, tuberculosis, venereal diseases, diseases of the skin and gums, and dental deterioration.[63,71,77,82] One study of Job Corps applicants found that one-fourth to one-half required immediate medical attention for such reasons as asthma, tuberculosis, and cardiac conditions.[5] Infestations

of internal parasites were found to be common among impoverished children.[18] A large medical survey, which estimated that only half of its subjects were economically deprived, noted that over 8% of the adults were anemic enough to warrant medical care.[48]

Dental problems are frequently noted.[5,30,61] One survey of disadvantaged school-aged children found that while 97% needed dental attention only 8% had received it. Twenty-two percent of these children had lost some permanent teeth, while one-fourth had teeth so decayed that extraction was necessary.[5] Dental neglect in childhood can lead to severe dental and orthodontal problems in later life and can cause speech, cosmetic, and psychological difficulties.[20,63]

Visual problems also have been cited.[61,63] Screening tests among a group of Head Start children showed that approximately one-fourth had visual problems while some 5% were partially blind.[18] Underweight and premature births, common among the poor, tend to be related to a higher incidence of visual problems.[5] Since vision deteriorates with age, it seems likely that defective eyesight would be a common problem in the ABE classroom.[87]

The ABE learner also may suffer from a higher incidence of hearing problems, as hearing defects have been found more common among premature and underweight births.[5] This difficulty may be neurological; one study found that disadvantaged children tended to show some problems in processing auditory information.[66] A comparison of blacks and whites suggested that blacks have a better sense of hearing than whites.[57] While blacks do form a large proportion of ABE learners, it must be remembered that the sense of hearing begins to deteriorate at

a fairly early age, and that disadvantaged adults tend to show the effects of aging more rapidly than do middle-class persons.[87]

Poor diet is frequently mentioned as a source of health problems.[13,19,57,77] Although there is some debate over whether this is attributable to ignorance of good dietary practices or lack of money, the consequences are less arguable.[1,19,48] The survey mentioned earlier, in which only half the group was economically disadvantaged, found deficiencies in vitamins A and C, thiamine and riboflavin.[48] Dietary inadequacies can lead to a generally low level of energy and a lack of resistance to infectious diseases.

A possibly more severe consequence of poor diet is the result of protein malnutrition during pregnancy and in the first few months of the infant's life. There are strong indications that inadequate protein intake during this period results in deficient neurological development, and the effects seem to be irreversible after the age of six months.[15,25] Results may include lowered intelligence, perceptual dysfunction, and impaired language ability.[2,15,30,68] This suggests that a good proportion of ABE students may have very specialized learning problems.

The poor are also unlikely to seek medical attention.[1,82] Again, it is debatable whether this is due to ignorance or unavailability of services. There is some indication that the poor are more stoic about pain; one study of lower-class adults found that only 20% were concerned by symptoms such as loss of appetite or chronic fatigue, headache or backache.[5,58] Health may be stated as an important asset, but it may receive little attention until illness is incapacitating.[81] Seeking medical attention has its social aspects; people tend to discuss

symptoms with their friends and await social sanction before consulting a medical expert.[47] Considering the poorer adult's disregard of physical discomfort described above, it seems unlikely that he would be encouraged by his peers to seek medical attention.

Implications

The foregoing information suggests that the ABE teacher may find his students suffering from frequent illness, a generally low level of energy, and hearing, visual, and perceptual problems which can interfere with the learning process. The most obvious conclusion is that the general level of health of these adult learners needs to be improved, but the ABE program has limited resources for such an undertaking. However, the following suggestions might be practical and useful to the ABE teacher:

1. Applicants for ABE programs should have their vision tested.
2. Applicants for ABE programs should have their hearing tested.
3. If possible, a complete physical examination would be useful. As the learners may feel some reticence about visiting a doctor, this would probably be most effective after enrollment when some rapport has been established with the program staff.
4. The ABE teacher or Program Director should be fully aware of all medical resources available in the community. These typically include hospital clinics, public health service, Vocational Rehabilitation, and service groups such as the Lions Club.
5. Many groups, such as the Cooperative Extension Service or Planned Parenthood, can provide training materials or readable literature on health matters which could be incorporated into the ABE program. Considering the evidence that health and dietary practices are social phenomena, these materials would probably be most effective if used in a small group discussion setting.

6. The learning environment can seek to accommodate vision problems:

   (a) Lighting should be bright, but the room free of glare.

   (b) If a chalkboard is used, it should be clean and free of glare.

   (c) Seating should be arranged to allow maximum visibility from all points.

   (d) Large-print reading material should be used whenever possible.

   (e) Teacher-made materials should be carefully checked for legibility.

   (f) Visual "rest breaks" can be provided by alternating book work with discussion or chalkboard demonstrations.

   (g) Alternating near-point and far-point vision can prevent fatigue; it might be helpful to have several bright posters on the classroom walls to encourage far-point visual focusing now and then.

   (h) Clay-coated (slick) paper may cause glare in poorly lit classrooms. Materials printed on rougher paper may be more legible.

7. The learning environment can seek to accommodate hearing problems:

   (a) There should be a minimum amount of distracting noise.

   (b) If acoustics are poor, it may help to seat the learners in a semi-circle close to the instructor.

   (c) The instructor should speak slowly and distinctly and should be visible to all learners when talking.

   (d) Lecture may be a less effective technique than discussion.

   (e) The instructor should check frequently to determine whether learners have understood what has been said.

   (f) The instructor should attempt to vary his voice; it is difficult to maintain concentration on a monotone.

8. Seating arrangements should be comfortable. Adults may find desks designed for students to be very uncomfortable. If such desks are the only seating available, frequent short breaks would be advisable. Informal seating in chairs around a large table would probably be the most comfortable arrangement for adults.

9. Adult learners may be more sensitive to cold than younger students. Heating and ventilation should be adequate.

10. It may help to reduce fatigue if refreshments are available for a coffee break during study. If snack machines are not available, learners could be encouraged to bring their own refreshments.

LEARNING ABILITY

Learning is an extremely complicated process, even when studied in such a simplified environment as the psychologist's laboratory, with white rats running through a maze for feed pellets. But people are not white rats and life is not a laboratory maze! Stretching contemporary theories and principles to explain the behavior of adult human beings in a real world environment is most difficult, if not impossible.

The discussion which follows cannot solve this problem, but it does try to look at a sample of the research and writings on learning among disadvantaged groups to determine what ideas might be most useful to the ABE practitioner. Of course, not all variables that affect learning will be discussed. There are many factors that are extremely important in planning learning programs for ABE students, but trying to weave them altogether can leave one frustrated and confused. Rather, the attention here focuses on a few factors related to learning ability which have recently received a good deal of attention. These factors are (1) developmental aspects (how the ABE learner grew up), (2) differences in abilities between disadvantaged learners and more affluent groups, (3) factors related to aging, and (4) particular characteristics of the disadvantaged individual's learning style. Some attention is given to practical recommendations for the ABE classroom.

Developmental Factors

1. Physiological. Malnutrition in the pregnant mother and consequently in the newborn infant seems to affect the development of the child's nervous system--the biological base from which learning

ability develops.[2,5,15] There is some question as to whether or not malnutrition that affects neurological development, and which can actually limit the number of brain cells, is directly connected with mental development. Studies with animals do show a direct link between problem-solving ability and protein or vitamin deficiencies.[2,5] Case studies have shown that children who were severely malnourished as infants score significantly lower on intelligence tests than well-nourished children of the same race and class.[15] If the diet is corrected before the infant reaches the age of six months, intelligence appears to develop normally; if malnutrition is not corrected by that time, the damage may be irreparable.[2,15]

While there are strong indications that a difficult or premature birth and malnutrition during infancy cause later learning problems, these matters cannot be tested with children in the same way as with laboratory animals. A second factor that makes the evidence a little less clear is that disadvantaged groups in the United States probably do not suffer as much from malnutrition or lack of prenatal medical care as would the poor in an underdeveloped country, the subjects of much of the pertinent research in this area. However, America's poor do have a higher incidence of inadequate diet, premature birth, and birth complications than do the American middle class.[5]

Though studies do not show conclusively that disadvantaged children have a significantly higher rate of neurological impairment than more affluent children, they do have a higher incidence of the learning problems usually attributed to this cause.[13,30] These kinds of learning problems include poor language development; reduced speed of perception and information processing; poor, short-term memory; and

inadequate hand-eye coordination.[2,30,68] In a sense, it is as if disadvantaged children have the physiological background that would develop neurological impairment, and show all of the symptoms that might be expected, but the actual brain damage has not yet been found. One suggestion for this puzzling state of affairs is that middle-class children have certain physical and social advantages in their environment that give them an opportunity to develop means of accommodating the neurological impairment, while poorer children do not have this chance.[13]

Other tentative support for the effects of birth complications and poor infant nutrition lies in a different kind of reasoning. Females are better able to synthesize proteins (the body makes some necessary proteins from the other proteins in the diet) than males, and they are less vulnerable to stress, including the kind associated with birth difficulties. It would be logical therefore to expect that disadvantaged females would have fewer of the learning problems related to these causes than disadvantaged males. And this is what has been found; disadvantaged male children do have a higher rate of learning and behavioral deficits than their female peers.[13]

2. Environmental. There seems to be little argument against the theory that environment plays a great role in developing a healthy infant's intelligence. Total sensory deprivation (absolutely nothing for the infant to see, hear, or touch) is, of course, extremely rare. But some studies revealed that children reared in a "sensory deprived" environment showed drastic environmental effects. These children were reared in orphanages which had little money for staff, and as a result the children were confined alone in their cribs and rarely had any

human contact; they were also not eligible for adoption. At the age of about two months, when the children first entered the orphanage, they had an average IQ of 100. Among older children, who had spent two years in the orphanage, the average IQ was down to 54.[21,49]

In American disadvantaged children the environment does seem to be related to achievement and ability as measured on standardized testing. In one instance, factors associated with poor performance on a reading test were: poor housing, low parental aspirations for the child's education, a large number of children in the home, and limited conversation in the home.[91] A review of the literature on intelligence differences concluded that a deprived environment can prevent intellectual development in two ways. First, it may not provide the child with opportunities to grow to full potential; and, secondly, it may not develop the cultural and motivational preparation to do well on standardized tests.[68] The influence of an impoverished background also seems to be independent of race or socioeconomic status.[68,91] An interesting study suggested that the schools may worsen, not help this problem. In this survey it was found that the brightest ghetto third-graders, especially boys, tended to be in the lowest achieving classes. The author concluded that bright children were hard to handle and that good grades were handed out on the basis of quietness and passivity.[56]

Group Differences in Test Performance

While warned to prepare for varying levels of ability, ABE teachers also are told to expect students with below-average learning ability.[61,82] Despite a normal range of abilities, disadvantaged

children do not show school achievement on a par with nondisadvantaged children, possibly due to a deprived environment's effects on language skills.[67] These children also do poorly on group intelligence tests. Information and vocabulary scores are generally lower than reading comprehension, and nonverbal performance is somewhat higher than verbal performance.[13]

Among adults, one study of a nationwide sample who took the GATB found that the disadvantaged adults did much more poorly than the advantaged adults, even though both groups had about the same educational level.[34]

There has recently been a good deal of attention paid to the roles of environment and heredity in learning ability.[38] Much of this has centered around the contention that different racial or ethnic groups may have genetically different types of intellectual ability.[39] While this theory was purportedly intended to argue for better early childhood education, it has aroused bitter conflict. There are some good indications that current scientific methodology cannot explain intellectual heritability.[51] Very briefly, the mathematics used in this kind of theorizing were developed for the biological sciences, and are inappropriate for studying human intelligence; trying to understand the inheritance of human learning ability with these tools may be like trying to figure how much a person weighs by measuring his height.

It may very well be that intelligence tests measure only how well a person has learned to take standardized tests. However, since testing is frequently used by ABE teachers for diagnostic purposes (and may also be one of the learner's most vivid memories of school) some discussion of group differences on standardized testing is given

below. When group differences seem to appear, it should be noted that they tend to show differences in test-taking performance, and nothing else.

In general, black subjects of all age groups, except early infancy, score lower on intelligence tests than whites, even when education and socioeconomic status are controlled.[23] But, when test comparisons show a "significant" difference between groups, 91% of the black group have the same scores as the white group.[22] The term "significant" has a much more precise definition in statistics than it does in everyday language. And, if group differences on test scores are admitted, individual differences are far more important. For example, one study of black school children in a large Southern city found a difference of 26 points between the average scores of deprived and upper-class children.[90] Another study investigating the verbal performance of black and white school children found that black children reared in the South did much more poorly than those reared in the North. This led the authors to conclude, among other things, that black-white intelligence differences may be due to a failure in verbal communication rather than a lack of comprehension.[10] These studies also suggest that environment is the crucial factor in standardized test performance.

There is also some suggestion that the concept of "class" may not be appropriate in discussing American blacks. Class is the concept used in determining socioeconomic status. The use of such a concept is a control to insure that the test scores of one economically deprived group will be compared with those of a similar group rather than an affluent sample. However, some writers contend that studies using this

concept to compare intelligence along racial lines (particularly older studies) are in error. These authors feel that black Americans should be considered almost a separate caste.[22,59,69] A person can move upward in a class society (e.g., Horatio Alger, My Fair Lady) but in a caste society he is born into a position and remains in it for life. This latter condition does seem applicable to American blacks; regardless of education or income they may be denied the social participation allowed whites of any social or economic class. It seems reasonable that this might be the case, and it would certainly have its effect upon the motivational and attitudinal aspects of test-taking. The argument should also apply to other groups which have been the target of discrimination.

Again, there is the problem of deciding what intelligence tests actually measure. One study of Mexican-American and Anglo-American children of comparably low socioeconomic status found that intelligence test scores were not related to the learning ability of the Mexican-American children. The researcher suggested that while 80% of learning ability expressed as IQ is genetically determined, 60% of the factors related to educability are environmental rather than genetic.[40]

What has been written so far should reflect the general state of confusion surrounding the problem of learning ability. It may help to pause and draw a few tentative conclusions. The first conclusion is that standardized test scores among disadvantaged groups and ABE learners may chiefly measure the learner's ability to take tests. The teacher may be safer relying on common sense, feedback from the learner, and intuitiveness in planning learning sequences. The second conclusion is that adults who form the clientele for ABE classes may

come from a background that makes formal education difficult for them. There is the slight possibility that they have impaired learning ability, but there is a far greater likelihood that they will not have firmly established educational foundations upon which new learning can be built.

Aging

Aside from the environmental factors of being economically disadvantaged one also must remember that ABE learners are adults. Studies of adult learners are not as common as those of children, hence it is difficult to get a clear picture of the older learner. In some cases learning does seem to show a decline with aging. At least one writer suggested that this may appear to happen because so many adult studies are based on "captives," such as hospital and prison inmates.[35] There is still a tendency to think that you can't teach an old dog new tricks, but in general this does not seem to be true. Reflexes slow with age, and older learners cannot work as rapidly as young ones, but when time is not a factor in the test or learning situation learning ability does not seem to decline with age.[80] Several longitudinal studies of male college graduates over a period of 40 years found no decrease in performance. There was even improvement in such areas as general information, vocabulary, reasoning, and judgment.[35,65] Another follow-up study of adults who had been diagnosed as feebleminded when boys found an average gain of 11 points on their later intelligence test scores.[53]

Many of the changes that make it appear difficult for adults to learn are due to physical deterioration. Reaction time slows with age

and vision and hearing grow less acute.[87] Unfortunately, aging seems to occur more rapidly among disadvantaged adults than among the total population.[87] They also are less likely to have had the necessary medical attention (such as eyeglasses and hearing aids) that would help overcome these problems.

Another factor that may make older adults seem less intelligent on standardized tests is that so many of these tests are based on the information and skills that a high school graduate would be expected to acquire. Much of this information is forgotten almost immediately; for example, how many college graduates could divide a fraction properly? Again, the educational level of the United States has been steadily rising. Adults taking intelligence tests today may not have had as much formal education as the children upon whom these tests were standardized.[53]

While it can be assumed that learning ability does not disappear with aging, but only works more slowly, some specific abilities do seem to show a decline. Among these are abilities that require reasoning by analogy, recall of new materials, and general perceptual and motor skills.[87]

Learning Characteristics

Educators frequently mention that disadvantaged learners in all age groups tend to rely on concrete rather than abstract modes of thinking.[1,89] The difficulty in changing from the concrete to the abstract is seen to stem from the disadvantaged child's language deficiencies.[67] Concrete thinking takes longer for these children and accordingly they are judged to be poor learners.[67] One author went

so far as to suggest that 90% of the children in schools could perform adequately if given enough time.[6] Teachers have reported that economically deprived children are less adept than middle-class children in abstract functioning and classifying visual stimuli, and that middle-class children have an advantage in tasks requiring precise and abstract language. This deficiency is attributed to a deprived environment that does not give the child a change to learn how to categorize and integrate information.[41,90] Related disabilities among impoverished children may be: difficulty in stating the sequence of events, perceiving cause-and-effect, and grouping concrete phenomena into classes.[79] It has been noted that ABE students may have difficulty in identifying the crucial elements of a learning task.[88]

The disadvantaged also may be characterized as having perceptual deficiencies and problems of visual and auditory discrimination and spatial organization.[67] As discussed earlier, developmental factors can affect the learner's visual and auditory perception skills. The relationship between perceptual retardation and reading problems is crucial when the child's environment does not permit him to develop compensatory skills.[13] One study found that disadvantaged children who had low scores on a test of discrimination between abstract visual stimuli improved up to middle-class norms simply through practice in looking at similar stimuli.[21] Sensory deprivation also may lead to a lowered ability for spatial visualization and perception of spatial relations.[68] Poor visual perception can be a real problem; normal middle-class children with this difficulty were rated by their teachers as making poor social adjustments in school and doing below-average

work.[26] Presumably the problem would be even greater among disadvantaged children.

The disadvantaged are frequently described as responding more to visual or tactile stimuli than to auditory stimuli.[44] Disadvantaged children tend to do poorly on tests of auditory discrimination, which has a direct relationship with reading ability.[21] In word attack skills, their visual discrimination seems to be better than their auditory discrimination.[13] Again, the cause is placed in environmental factors; children with limited experiential backgrounds consistently show poor auditory discrimination, and the restricted language poorer children learn is seen to develop inadequate habits of seeing, hearing, and thinking.[33,90]

Of course, reading involves both hearing and seeing, and using the two skills together. An extensive study of ghetto primary school children found retarded readers were likely to have difficulty in shifting from one modality to the other. Auditory discrimination was better for simple stimuli, but when the problems were complicated the visual mode was more effective.[46]

The most fundamental learning achievement is reading, and poor reading can be taken as widespread among economically deprived groups.[74] Studies of children suggest that this deficiency is cumulative, with the disadvantaged child falling farther and farther behind his peers every year. One study noticed subnormal reading skills among disadvantaged children as early as the third grade; by the sixth grade 80% of these children were retarded readers. Oral reading and vocabulary were generally lower than comprehension.[13] Ghetto children may show a reading level two or three years behind average and may have a

vocabulary only half as large as that of the middle-class child.[31,90] The lack of a "tradition of literacy" may leave the poor child with a limited vocabulary and a language structure that is not complex enough to deal with sophisticated learning tasks.[43,72] Elementary school failure can be as much as six times higher among disadvantaged children than among more affluent children.[19] When remediation is attempted, many of these children respond to techniques designed for those with perceptual dysfunction.[30]

Cumulative reading deficiencies are carried over into adult life. It is discouraging that the educational abilities which seem most resistant to the aging process (vocabulary and general information) are among those most weakly established in the disadvantaged child. Thus, part of the substructure that has allowed the more fortunate adult to mature and grow throughout his life span is likely to be missing in the ABE learner.

Each ABE program should evaluate the reading ability of its learners. A comparison of a group of ABE programs found the average reading level to be at about the eighth grade; this skill showed less decline in the adults than others, such as arithmetic or spelling.[45] Frequently there is a discrepancy between the number of years the adult has spent in school and his reading level; the latter typically tests out two or three years lower than expected.[28]

Implications

While the literature reviewed here gave no comprehensive basis for describing how ABE students learn, one can gain a few insights which may be useful in the ABE classroom. The following suggestions are offered for your consideration. You will probably think of others.

1. Don't rely too heavily on tests. Teachers use standardized testing to determine the needs of their students and to measure how much they have progressed. But indications are that ABE learners are poor "test takers" and probably are performing at a level well above what their tests indicate. If one wishes to analyze student needs, it would probably be best to supplement formal testing with other techniques, such as asking the learner to read a paragraph and describe what it says, or giving him an arithmetic problem to work and watching to see where he has difficulty. An informal, handwritten test may be less threatening than a printed test, and, consequently, may give a better indication of ability. Teachers also would do well to avoid timed tests in favor of untimed power tests. For measuring progress it might help if the teacher and student develop a plan of work so that the student can tell when he has accomplished one learning task and is ready to progress to another. Knowing that one has learned how to do simple multiplication and subtraction with borrowing is far more meaningful than hearing that one has progressed three-tenths of a grade level.

2. Recognize the difference between slow learners and incapable learners. ABE students are adults who have a minimal education and have been out of school for a long time. They need time to become accustomed to a structured learning environment. They probably have many of the problems associated with aging. This means that the teacher must avoid equating slowed reactions and deteriorating sight and hearing with a loss of learning ability. Teachers who are used to the quickness of young children may be dismayed with their adult

learners. And the learners themselves may need a lot of convincing before they believe that they can learn.

3. Use redundancy. The dictionary meaning of redundancy is "unnecessary repetition," but in human communication it refers to the process through which a message gets its meaning across in a variety of ways. For example, if you tell someone you're glad to see them, the meaning is also expressed by your smile, your tone of voice, and your handshake. The ABE learner may need a lot of repetition for two reasons; his short-term memory may not be as good as it once was, and he may require a lot of information to build up concrete concepts. As an example of this, think of what the brief symbol "pi" conveys to a trained mathematician, and how many words would be needed to get the same idea across to a layman.

4. Spend some time teaching learning skills. This suggestion is easier to prescribe than describe. If ABE learners are poor in conceptualization, generalization, and discrimination, the teacher can help to develop those skills. Students can learn to look for cause-and-effect in math or reading problems. They can learn to form concepts by being asked such questions as, "Why are vowels different from consonants?" or "Why is this group of words a sentence when that one isn't?" Puzzles and games can be adapted for adult use and can teach academic skills at the same time. The children's game of Categories, where a category is chosen and each player has to name something appropriate starting with the next alphabetical letter (e.g., Countries: Algeria, Belgium, Canada . . .), teaches categorization at the same time as vocabulary and spelling.

5. Don't rely on abstract thinking. If disadvantaged learners tend to be concrete thinkers it may be easier for them to learn procedures before they understand the concept. It may, for example, be relatively simple for the adult to learn how to do a long-division problem before he can understand how division works.

6. Teach visual perception. Aside from vision problems, the ABE student may have to learn how to distinguish one printed symbol from another. He has been out of school a good while, and writing the English language may be as confusing to him as distinguishing the symbols in Chinese calligraphy would be to you. It may help to ask students to tell you how the letter "b" is like "d", what the difference in shape is between "p" and "q." Handbooks published to help students prepare for nonverbal tests contain a good deal of practice in nonverbal reasoning and visual discrimination. These are entertaining as well as instructive, and can improve student morale.

7. Teach auditory discrimination. Oral spelling quizzes where the learner must distinguish between words like "pet" and "put" are good. If a tape recorder is available the teacher can record sounds and ask the students to identify them. The students can record their own voices and then try to transcribe the playback. This approach is also a good way to teach writing and composition skills. The ABE teacher might want to investigate the various commercial programs designed for developing listening skills. Many of these are helpful in teaching auditory discrimination.

8. Don't rely on one method of instruction. This relates somewhat to redundancy, but is meant to suggest that the teacher should use a wide range of techniques and materials. Some students learn best

from a discussion, others from working through a problem with the teacher's guidance. Other students may be able to provide concrete examples that help in learning a concept. The learner should not be bombarded with activities, but he should have a wide range of alternatives to choose from. Since auditory perception seems to be weak in ABE learners, a lecture by itself is probably not the best technique to use with students.

9. Concentrate on reading comprehension. Studies suggest that comprehension is usually the best developed skill among disadvantaged readers but it is frequently measured through oral reading, vocabulary tests, or short-term recall of the material. These skills can be expected to be fairly poor, particularly since written tests involve spelling. Oral discussion may be the best way to determine if a reading has been understood.

LANGUAGE AND COMMUNICATION

Learning is an act of communication and the use of language is one of the keystones of the ABE classroom. It would be hard to imagine a single educational task that does not rely heavily on language skills. Unfortunately, communication--in reading, speaking, and listening--is often the most frustrating area for the ABE learner. Even more tragic is the fact that educational resources frequently seem almost completely ineffective in improving the communication skills of these learners. The following section does not give the teacher a complete program on how to overcome the reading and language-based needs of ABE students. It does give a brief overview of some studies that might provide useful background information for the classroom teacher.

The "Language Deficit"

A number of studies have noted that the disadvantaged possess language deficiencies which interfere with learning and social interaction and which may account for poor performance on standardized tests.[3,4,14,73,76,78] Various authors have described this deficit in different ways. The inadequacies may include a limited vocabulary; an inability to use abstract symbols and complex language; poor syntactical structure; difficulty in developing verbal thought sequences; restricted verbal comprehension; and reliance on nonverbal communication.[67] Disadvantaged children may not develop the formal language that middle-class children learn--the language that is needed in the classroom and in dealing with strangers and authority figures.[25]

One clue to the language difficulties of the disadvantaged learner lies in the theory of Basil Bernstein, a linguist who distinguished

between "public" and "formal" language. "Public" language is the type which develops among the members of a closely knit group, such as a family, a work team, or a circle of friends. It has a background of shared identification and emotion; it tends to be warm, intimate, and concrete, with a number of "gaps" where information can be omitted because the group members know one another so well. An example of this might be a married couple who have lived together so long that they can carry on a conversation with only a few phrases and facial expressions. The second type of language--"formal"--is more suited to dealing with people outside the group. Since the persons communicating are unfamiliar with one another, their speech must include a good deal of careful verbalization and a complex syntax to insure understanding; a teacher's lecture is an example of this type of language. Bernstein argued that the home environment of the disadvantaged child does not teach him this second, "formal" language, and the child therefore enters school at a disadvantage. He is, in effect, expected to learn in a foreign tongue.[4]

This theory does not suggest that the language of the disadvantaged is inferior or incorrect. Even the most urbane, educated person has a restricted "public" language which he uses with family and friends. Indeed, this restricted language is necessary; one need only pick up a Victorian novel to see that speaking like a grammar book is a poor way to convey intimacy and emotion. The lack of a "formal" language simply places the disadvantaged learner in an uncomfortable position when having to deal with outsiders. The restricted "public" language is not adequate in applying for a job, participating in a classroom, or dealing with authority figures.

This is not to imply that disadvantaged learners are less verbal than their middle-class peers. Researchers found that ghetto children and adults have a rich oral tradition and a great respect for verbal adroitness.[60] A study of teenage gangs found high respect for members who could devise verbally sophisticated insults and toasts to entertain their friends.[27] In some fairly unstructured tests of verbal creativity poor children were more creative than middle-class children, giving responses that were less conventional and more original.[73] One writer referred to research comparing the speech and attitudes of poor and middle-class boys and concluded that the restricted language may have some advantages. It is less competitive, more generous, and more reflective of in-group solidarity.[14]

Other studies also noted the positive functions of the restricted nonstandard language. It carries a sense of group belonging.[55] The particular characteristics of black English serve both to identify group members and to protect the community from outsiders, with separate languages developed for black-white and black interpersonal communication.[17,37] The same line of argument should apply equally well to other isolated subcultures or groups facing outside pressure, such as Appalachian whites and American Indians. However, the lack of a formal standard language can cause problems for the disadvantaged learner in a variety of ways: stigmatization, communication breakdown, and interference with learning.

Perhaps the most serious difficulty is that the use of nonstandard English can have a stigmatizing effect on the speaker. It is frequently difficult to tell just what a listener finds objectionable; small errors may be enough to bring about stereotyping.[90] Ethnic

background can have a strong influence in determining how the listener judges a speaker, with nonstandard English generally arousing an unfavorable evaluation.[55] Subjects listening to tape-recorded speeches generally can distinguish whether the speaker is black or white and tend to judge the nonstandard speakers less favorable; black listeners are more lenient toward black dialects than are white listeners.[3] However, listeners frequently cannot guess the race of college-educated black speakers, blacks who have been reared in isolated northern areas, or rural Southern whites.[3,50] This suggests both that there are no true "racial" differences in speech and that speech stereotyping plays a large role in setting the scene for prejudice. Teachers have been found to judge student ability, in general, on the basis of how well the learner uses standard English.[3] Language stereotypes are so strong that if a listener hears an improper usage as little as 20% of the time he will tend to "hear" it all of the time.[50]

Communication breakdown can occur in the classroom simply because the teacher and learner are, in effect, using two different dialects, with separate rules of grammar and sets of homonyms.[50] This can make learning to read a frustrating task. If, for example, the student reads a sentence as "He run_ to they_ house," the teacher probably will correct him by saying, "He runs to their house." Both sentences sound the same to the student and reading becomes a very confusing matter. Such "hearing" problems are not hard to imagine for anyone who studied a foreign language. The use of nonstandard homonyms (such as "pin" and "pen") may not be a problem if the student has had an early and thorough exposure to books.[55] In this case he can adjust to seemingly arbitrary spelling differences, just as a standard speaker learns to

deal with "here" and "hear." However, learners without this educational background can find the problem an additional handicap.

The inability to distinguish certain sounds is not the only problem facing the learner who uses a nonstandard language. Disadvantaged children also enter school with deficient vocabularies and a lack of practice in listening to prolonged speech sequences.[7] They may not possess the vocabulary to make fine distinctions between categories of events or objects, a necessary skill in formal education.[42] Any child who is to function adequately in a school setting must first have developed rudimentary learning skills in his early years: the basic abilities to categorize (tell how things are alike), differentiate, and draw conclusions.[70] All of these abilities rest on language resources. The difficulties do not "disappear" as the children mature, for among adults reading is closely linked with the learner's facility in oral language.[16] One pragmatic observation is that the disadvantaged must learn to master standard, formal English if they wish to use education for upward mobility, simply because this is the language in which books are written.[72]

Social and Developmental Aspects

If disadvantaged groups tend to speak a restricted and nonstandard English there must be some reason for this. A language does not grow in isolation; it is shaped by social, cultural, and psychological factors. Frequently the child's home environment is identified as the source. Disadvantaged mothers may not encourage their children to think inductively and use a complex language structure.[25] For example, the mother may be likely to say, "Stop that!" rather than, "Please,

darling, find something else to do until I have finished cleaning and we can play together." This does not mean that disadvantaged mothers are more punitive and less loving than middle-class mothers (they aren't); it simply reflects different language styles to carry a basically similar message. But "stop that" does not request the child's cooperation, call upon his initiative to think up some other activity, or promise a future event.

There may be good reasons for this disadvantaged language style. An extensive survey of mothers in an urban housing project found that they spent an amazing amount of energy admonishing their children to "be good." Being good consisted of remaining silent, passive, and physically inactive. The mothers' behavior was basically logical; the area had a high crime rate, and tenants changed so rapidly that the women were afraid to let their children play outside or socialize with the neighbors.[78] Faced with the task of spending all day confined in a small apartment with young children, these mothers had little choice but to keep them as quiet as possible.

Another argument stressing the powerlessness of the poor suggests that their language may be simple and undifferentiated because they have few opportunities to plan for the future or choose among alternatives.[36] For instance, a family would not discuss vacation plans--which place to choose, how to save money for the trip, or when to schedule it--unless they had the money for it. A man would not weigh the attractiveness of two different job offers if none were available.

Although deprivation appears to affect the language of black children more than white children, the causes are more social than racial.[91] A study of socioeconomic influences found that middle-class

black children did far better than poor black children in tasks requiring precise and abstract language.[41] Another study found that children reared in the South had lower levels of communication than those reared in the presumably more urban North.[10] Poor children often show less verbal productivity in talking to adults than to their peers, sometimes using only one-third as many words with authority figures.[13,90] They may also respond more to tonally inflected verbal reinforcers--when the experimenter says "Good" with a lot of expression--than do middle-class children.[8]

How are these findings related to one another? One suggestion is that the ability to communicate rests in the "overlap" of life experiences of the parties involved.[17] If there is little shared experience between the disadvantaged learner and his teacher, the learner may well be less verbal and more sensitive to nonverbal cues. This tendency is not limited to disadvantaged learners--middle-class children and adults often react the same way. For example, one experiment found that when middle-class subjects heard a confusing or contradictory message they relied on the speaker's facial expression to get the true "meaning."[9] That is, if the speaker delivered a sharp criticism with a friendly smile, the smile was noticed much more than if it had been offered with a compliment. This is a communication problem similar to that confronting the disadvantaged learner.

Finally, there is the suggestion that social influences may directly shape a group's distinctive language style. As mentioned earlier, some suggest that black English was developed both to foster a sense of group identification and to protect the community from the white world.[37] One type of language serves to deal with the outside

culture while another is used for in-group communication. While this point of view is concerned with black English, the same argument might apply to other isolated subgroups. Appalachian whites are notoriously reticent before strangers, but there is no evidence that their family life is spent in silence.

Characteristics of Nonstandard English

The first point to be remembered about any nonstandard dialect is that it is a total system, with rules that are as complex and regular as those of the standard language.[14,54,55] Because of this it should be considered a separate dialect rather than "sloppy" or incorrect speech. A number of studies have tried to determine the structure of American dialects. Most of the attention was centered on the speech of native-born blacks, but it is important to remember that few dialectic differences can be assigned precisely to any one group. Since the ABE teacher can expect to work with learners who are almost literally speaking a different language, it may be helpful here to review some of the characteristics of language in three different groups: disadvantaged whites, American Indians, and blacks.

Raven McDavid noted that many impoverished whites are at a great disadvantage when they migrate from rural Southern farms and mountains to large northern cities.[55] Not only do they lack the work skills needed to find employment; but, for many, language differences identify them as "different."

The Southerner's pronunciation differs in many ways from that of his Northern neighbor. He may retain many distinctions (such as "aunt" and "ant") that Northern pronunciation has lost, but he may tend to

simplify clusters of consonants, saying "ax" for "asks." There also may be a tendency to drop the final "s" sound from plural nouns or third-person singular verbs. When "i" or "e" appear before a nasal consonant they may be given the same sound, making homonyms out of "pin" and "pen," or "winch" and "wench." Southerners also use a wider range of pitch in speaking and give more difference to strongly and weakly accented syllables.

Oddly enough, Southerners actually speak more rapidly than Northerners. The illusion of the lazy Southern drawl is caused by a tendency to prolong the strong syllables and shorten the weak ones. As an example of this, imagine speakers from the North and South pronouncing the words "borrow," "morning," or "mother."

An additional problem is that Northerners may not hear distinctions that are apparent to the Southern ear. To a Southern speaker the words "hod," "hard," and "hired" are pronounced differently, but they may sound as homonyms to a Northern listener.[55]

Of course, these problems are not restricted to confrontations between North and South. The Southern states are growing in population and becoming less isolated. Because of this, a Southern urban teacher who grew up surrounded by a standard English dialect may have trouble responding to the speech of rural learners.

The dialectical characteristics of American Indian English have not been precisely or completely described. Two problems arise in attempting to do so. The first is that many Indian groups have almost completely lost their original language, and their English dialect is hence more probably affected by cultural isolation than by their native tongue. The second problem is that American Indian languages are quite

dissimilar. For example, the languages of neighboring tribes in the Southwest may be as far apart linguistically as English, Finnish, and Mandarin Chinese.[92] A teacher dealing with American Indian students will have to rely on his own analysis rather than research.

As mentioned earlier, more research has been done on native black English-speaking Americans than other groups. Many of the differences that whites "hear" in black speech are either regional or educational.[50] It is difficult to tell how many speech characteristics are uniquely black and how many are shared with all Southerners. There may be many different black dialects, yet some of the speech styles referred to as such may actually be congruent with other dialects or standard speech.[72] The following list describes a few of the qualities that have been attributed to black English. The list is far from complete and does not imply that there is one and only one standard black dialect.

1. A tendency to drop the "r" or "l" sounds in some words, e.g., saying "dough" for "door."

2. A tendency to simplify consonant clusters, e.g., saying "chilrin" for "children."

3. A tendency to weaken final consonants, e.g., saying "ho" for "hold." This leads to a number of homoynms (mow = more; mine = mind) that can interfere with reading.

4. Substitution of "they" for "their" and "them" for "those."

5. Omission of the "s" sound at the end of possessive nouns and third-person singular verbs.

6. Nonstandard use of the verb "to be," occasional deletion of "is," frequent deletion of "are."

7. Deletion of "-ed" in regular past verbs, e.g., saying "He talk to me yesterday." Irregular verb past tenses are retained: "He told me yesterday."

8. The use of double subjects and double negatives, e.g., "The car it don't have no gas."[14,50,72]

Of course, black English, like any nonstandard dialect, is far richer and more complex than this short discussion suggests. It is no more proper to describe a dialect by showing how it departs from standard speech than it would be to "describe" English by showing how it differs from Greek. The intent of these sections has been simply to alert the teacher to instances where her dialect may differ from that of her students, and result in learning problems in the classroom.

While the studies from which the foregoing listing was taken simply described the characteristics of different dialects, other writings have been concerned with the learning problems a nonstandard speech may cause. One college remedial reading program found that students with severe reading problems did not respond to the usual training.[64] Their speech was characterized by inaccurate pronunciations, immature vocabularies, a rare use of descriptive words, the use of simple sentences or fragments, and the inability to understand figurative language. As might be expected, most of the students with these problems were from poor families living in rural areas and had attended small, isolated high schools. A long series of studies of deprived children's language found that the children were better in using descriptive adjectives than verbs; very importantly, they also understood a good deal more language than they used.[73]

In looking at some of the abstract qualities of disadvantaged speech, a number of characteristics appear that could hinder progress in the classroom.[1] These include a tendency to look at time as a series of discrete instances rather than a continuum, and to see the unique

quality of events rather than grasping a pattern of cause-and-effect. These characteristics could make it difficult to follow a long explanation or see progress in school work and could cause scheduling and planning problems. The disadvantaged language also tends to refer to external characteristics more than abstract qualities. It is easy to see how this tendency could raise confusion in understanding such subjects as arithmetic or grammar. If all of this discourse sounds a bit far-fetched, imagine trying to discuss the weather with an Eskimo--whose language has provided him with over a dozen different words for "snow."

Nonverbal Communication

A tendency for disadvantaged speakers to rely on nonverbal communication modes is mentioned frequently by educators.[1,67] There is a suggestion that the disadvantaged child's communication at home is more nonverbal than that of the middle-class child.[7] The ABE learner may rely heavily on nonverbal communication, giving more weight to actions than to words, and the tendency may be greater in the black learner.[44,61,89] And, as with verbal communication, different cultural backgrounds may lead to different nonverbal communication styles.[17]

While there has been a good deal of comment on the use of nonverbal modes among the disadvantaged, it is not clear whether they actually have a distinctive "body language." The restricted language code in itself places more reliance on nonverbal cues, such as gestures and facial expressions, than does the "formal" language code.[4] One author did attempt to list informally the nonverbal aspects of black English, noting that little substantive research has been done in the area.[24]

Her list of "unscientific guesses" included such things as specific gestures, like the black power salute. She also mentioned some differences that could lead to intragroup communication problems. For example, black children may tend to avert their eyes when speaking to an adult, as a sign of respect; this makes them appear shy or disinterested in the classroom. Adults may pay attention by staring fixedly at a speaker rather than punctuating the exchange with nods and short comments such as "yes" or "I see." This may be interpreted as inattention by a white speaker. Studies on the language creativity of children, mentioned earlier in this paper, concluded that disadvantaged children are less "word bound" than other children. They permit their language to interact with nonverbal means of communication such as gestures.[73]

Implications

None of the authors discussed in this paper suggested that nonstandard dialects should be eradicated. In fact, several suggested teaching "formal" language as if it were a second language.[90] Others felt it would be helpful for middle-class students to learn the languages of subgroups.[14,37] Listening and speaking training were suggested as aids in teaching reading to ABE learners.[63] Finally, a conversational "drawing out" technique may improve verbal fluency if the teacher or mother encourages the learner to talk about his actions, consider reasons for his behavior, and weigh the consequences of different alternatives.[25]

Aside from these general suggestions and others mentioned earlier in this paper, a few ideas are listed below. They may help in the classroom, or (better yet) give you some ideas of your own.

1. Identify the characteristics of the learner's language. Many classroom problems seem to occur because the teacher is not aware of the learner's speech characteristics. The teacher does not realize what words the learner hears as homonyms or what rules of grammar he is using. This can lead to total confusion, and it can make learning an uncomfortable process. If the teacher does not recognize that the ABE student is following a very regular, though nonstandard, set of language rules, correction may be meaningless. For example, explaining the past tense as the instance when "-ed" is added to regular verbs is not helpful to a learner who does not use that form and may not even hear it.

2. Be aware of your own nonverbal communication. If ABE learners tend to pay attention to nonverbal cues, the teacher should be aware of using them. If a nervous teacher tries to cover these feelings with glib speech and a frozen smile, the learners will notice the contradiction in the message even if they do not know its reasons. "Body English" has become a popular topic, and might make a good subject for classroom discussion. The learners may know as much or more than the teacher in this area, and may be quick to note that urban people tend to avoid eye contact with strangers, while rural dwellers do not; that Southerners tend to be more physically demonstrative with friends and relatives; etc. This type of discussion can make the group more comfortable, give the teacher insight into the nonverbal communication style of the learners, and help learners evaluate their own nonverbal styles.

3. Discuss dialectical differences. ABE learners may feel that a nonstandard accent or dialect is "bad," and such an attitude could

interfere with the learner's willingness to talk freely in class or to write. It may help to point out that everyone has a dialect, whether it is a Southern drawl or the accent of a proper Bostonian. Learners also can discuss dialects they have encountered and their reactions to these. For instance, Southerners may feel that Northern speech sounds flat and unfriendly, or that urban dwellers sound as if "they're trying to put something over." Discussing the historical or social origins of words (e.g., "sabotage" was coined from an industrial protest in which French workers destroyed machinery by throwing their wooded shoes--sabots--into it) may be more meaningful than memorizing lists of Latin roots. If ABE learners feel that there is nothing "wrong" with their speech, they may enjoy writing standard definitions for slang words they know. This is not only a good way to develop vocabulary but a needed educational lesson for the teacher in many cases.

4. Practice formal English. Attempting to teach an ABE class to speak consistently like an English grammar book is probably as useless as it is impossible. However, the learners may feel a need to be able to switch to "formal" English in some situations, such as applying for a job or a driver's license. Role plays are useful here, particularly if a tape recorder is available so that the student can analyze his own performance. The chief point is that different languages suit different occasions and the more languages a person speaks, the more situations he can master.

5. Teach reading as a second language. The vocabulary, spelling, and syntax of written materials resemble those of the standard more than the nonstandard dialect. It may be necessary to point out that

written language uses many conventions that the learner may not hear, such as the "-ed" on the end of regular past-tense verbs. It is probably not too helpful to correct a reader's pronunciation unless he has obviously mistaken a word. For example, reading "house" for "mouse" may show a comprehension problem, but reading "they" for "their" does not.

6. Use unstructured situations. Research suggests that disadvantaged children know a great deal more language than they use in formal situations, and that free, unstructured environments encourage the use of this language. As a result, group discussions may be a better way of ascertaining reading comprehension than a fill-in-the blank test. Vocabulary may be better measured by asking the learner to use a word in a sentence than by asking him to indicate a synonym or antonym for a word.

7. Encourage verbalization. Some of the methods discussed earlier may be useful here. Vocally reasoning out a decision, explaining why an arithmetic operation works, or discussing a topic may teach some of the skills of formal language. It certainly will enhance interest, participation, and a feeling of comfortableness in the classroom.

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